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**GRYLLOPROCIPHILUS FROSTI, NEW GENUS, NEW SPECIES,
FROM THE EASTERN UNITED STATES
(HOMOPTERA: APHIDIDAE)¹**

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Grylloprociphilus frosti probably lives on the subterranean parts of its unknown host for the major portion of its life cycle as is customary with most species in related genera. It is named in honor of Dr. S. W. Frost who collected the majority of the known specimens. It is described in the hope that other entomologists might help unravel the life history of this interesting species which apparently produces sexuparae only during the shortest days of the year.

***Grylloprociphilus*, n. gen.**

Antennae 6-segmented, secondary sensoria oval, ciliated. Fore wings with media simple. Hind wings with media and cubitus originating near the same point. Metafemora on sexuparae distinctly larger than pro- or mesofemora. Cauda rounded, indistinct.

Grylloprociphilus differs from *Pemphigus* Hartig, 1839, *Prociphilus* Koch, 1857, and *Stagona* Koch, 1857, in having the metafemora enlarged. From *Pemphigus* it differs in having more setae on R IV + V and the secondary sensoria with long cilia. From *Prociphilus* and *Stagona* it differs in having spine-like setae at the apex of the tibiae.

Type-species: *Grylloprociphilus frosti*, n. sp.

***Grylloprociphilus frosti*, n. sp.**

(Figs. 1, 2)

Characteristics: Head without wax plates. Secondary sensoria distinctly ciliated, sensoria on a.s. III on distal half, a.s. VI with numerous, conspicuous setae. R IV + V bearing 4 to 8 accessory setae.

¹ Paper number 2197 of the Journal Series of the North Carolina State University Agricultural Experiment Station, Raleigh, N. C.

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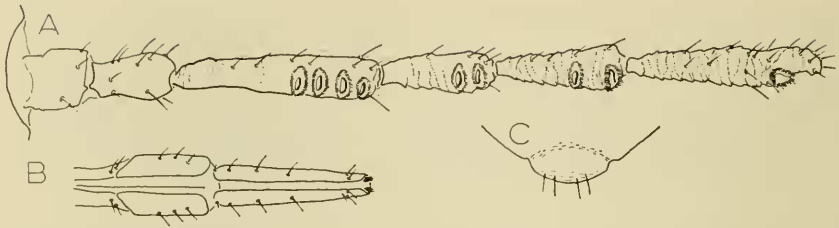


Fig. 1, *Grylloprociophilus frosti*, n. sp.: (A) antenna; (B) R IV + V; (C) cauda. (Drawings by John Graham)

Wax plates on dorsum of thorax distinct, distance between wax plates being approximately equal to longest diameter of plates. Protarsomere I with one seta distinctly shorter and more peg-like than the other setae. A slide in the U. S. National Museum bears the following data, "Flying, Nov. 19. 15. Abd. yellowish green slightly covered with cottony excretion."

Sexupara: Head dark, without wax plates. Antennae dark; setae on a.s. III approximately equal to $\frac{1}{2}$ diameter of segment, setae conspicuous, especially on a.s. VI; secondary sensoria on distal half of segments, distinctly ciliated, outer rim approximately $\frac{2}{3}$ to $\frac{3}{4}$ diameter of segment. R IV + V attaining second coxae and bearing 4 to 8 accessory setae.

Pro-, meso-, and metathorax with distinct oval wax plates. Distance between plates approximately equal to greatest diameter of plate. Metafemora distinctly larger (wider) than pro- or mesofemora. All femora rugose dorsally, denticulate ventrally. Distal end of each tibia with 4 spine-like setae. Other setae on tibiae long, many of them being equal to or longer than diameter of tibia. Tibiae without denticulations. Chaetotaxy of tarsomeres I-III, 3 to 7, variable, usually 6-5-4. Protarsomere I bearing one seta distinctly shorter and more spine-like than the other setae. Plantar setae approximately $\frac{1}{3}$ length of claw, pointed. Tarsomeres with faint denticulations.

Abdomen with marginal wax plates which are nearly circular and increasing slightly in diameter toward the caudal end. Marginal wax plates bearing 1 to 6 setae, those nearest the caudal end having the greater number. Two round medial wax plates on dorsum of abdominal segment I and one elongated plate on segment VIII which bears 4 to 9 setae. Genital plate with approximately 12 setae on the caudal margin and 12 more scattered over the rest of the plate. Gonapophyses variable, but usually bearing 4-3-4 setae. Anal plate with 5 to 9 setae, about the same shape and length as the setae on the cauda. Cauda bearing 3 to 5 setae.

Measurements:³ Body length 2.43 (1.73-2.94). R IV + V, 0.15 (0.11-0.19); a.s. III, 0.24 (0.18-0.29); IV, 0.14 (0.09-0.15); V, 0.15 (0.11-0.19); VI, 0.16 (0.14-0.19) + 0.04 (0.03-0.04). Hind tibiae 0.88 (0.65-0.89); hind tarsi, 0.22 (0.16-0.25).

Secondary sensoria. A.s. III 3-4 (3-5), IV, 2-3 (2-3), V, 2-3 (1-3).

Embryos of the sexupara with vestigial mouth parts. Plantar setae longer than the claws and expanded at the tip.

³ All measurements are in millimeters. The first number refers to holotype, the numbers in parentheses show the range of 11 specimens measured.

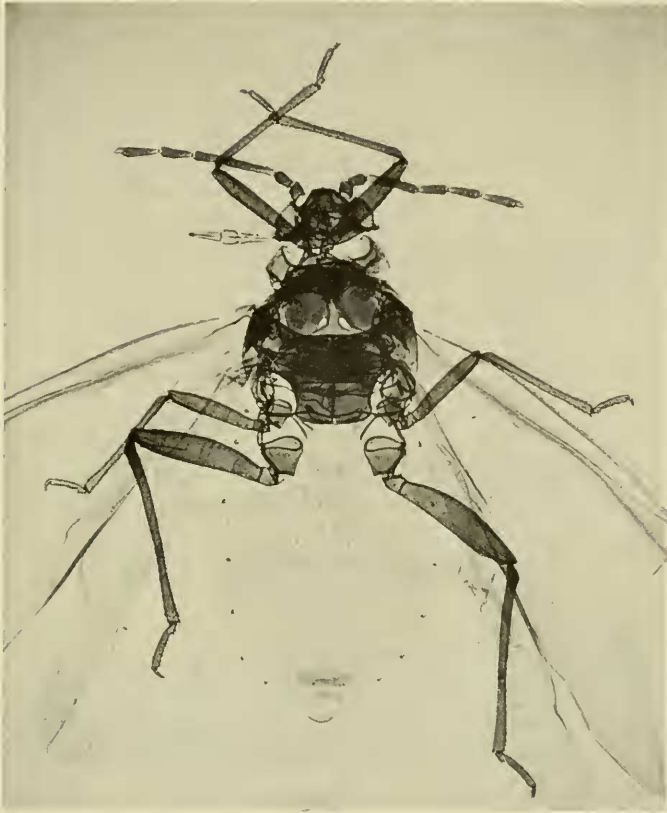


Fig. 2, *Grylloprociophilus frosti*, n. sp. (Photograph by A. T. Olive)

Type locality: Lake Placid (Archbold Biological Station), Florida.

Types: Holotype and some paratypes in the United States National Museum. Other paratypes in the collections of H. L. G. Stroyan, Harpenden, Herts, England; D. Hille Ris Lambers, Bennekom, Netherlands; the British Museum of Natural History, London, England; the Canadian Museum of Natural History, Ottawa, Canada; A. N. Tissot, Gainesville, Florida; the North Carolina State University at Raleigh; and the authors.

Collections: Data on 3 slides in the United States National Museum indicate this species was first collected "flying" November 18, '95 (probably 1895) (one specimen). No locality or collector recorded. In 1941 W. F. Turner collected a single specimen on January 29 in Peach County, Georgia. On February 3, 1932, P. W. Mason collected 3 specimens (one slide) "swarming" in Washington, D. C. Numerous specimens have been collected by S. W. Frost in a black light trap

at Lake Placid (Archbold Biological Station), Florida, 1958-1964 (Holotype and Paratypes), during the months of November through January. In a note Dr. Frost wrote "104 specimens taken night of Jan. 4, 1964, very few taken before or afterwards." John Graham collected one specimen in a "Sticky band trap" in a "Beech woods" at Raleigh (Umstead Park), North Carolina, February 24, 1962, one specimen in a "cob web, Nov. 28, 1963" and one "in flight, Raleigh, N. C., Jan. 5, 1962." J. O. Pepper and B. F. Coon collected one specimen in a black light trap at Center Hall, Pa., Oct. 19-26, 1958. We do not know the host of this aphid.

TEN NEW CHRYSOMELID BEETLES FROM DOMINICA AND JAMAICA

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The following new species of Chrysomelidae, with one exception, were collected during the Bredin-Archbold Smithsonian Biological Survey in Dominica. A. B. Gurney on his way back from Dominica collected a new species of *Oedionychus* in Jamaica.

***Habrophora thelmae*, n. sp.**

(Fig. 1)

Elongate oblong oval, clothed with short, fine, appressed, yellow pubescence; head, prothorax and breast dull brown, elytra, abdomen and legs paler yellow brown, elytra with dark spot on basal umbone and a dark lateral stripe from humerus along side to middle, an irregular fascia across elytra at middle, also 3 inconspicuous costae on each elytron with dense striate punctures on each side of them, the intervals between confusedly punctate; antennae pale yellow brown with joints 7, 8, 10 and 11 dark.

Head with interocular space half width of head, eyes emarginate, occiput and front with fine yellow pubescence, an inconspicuous dark median line, clypeus with finely punctate surface not completely hidden by pubescence, labrum pale, jaws piceous. Antennae extending to middle of elytra, long and slender, pale yellow brown with distal joints dark. Prothorax densely covered with pale pubescence that hides the dense punctation; a transverse depression in basal half, convex with rounded sides and very thin line marking lateral margin, prosternum taken up with coxal cavities, between these a moderately wide median area. Scutellum densely pubescent. Elytra elongate, thinly covered with appressed yellow pubescence and with 3 somewhat inconspicuous costae edged on either side with a dense row of striate punctures, intervals with confused punctures;